WHAT IS CLAIMED IS:

1. A method of making a transparent article, the method comprising

forming a protective coating including a layer consisting essentially of carbon on an optical coating on a substrate;

heating the protective coating in a reactive atmosphere;

reacting the layer consisting of carbon with the reactive atmosphere to form a carbon containing gas; and

removing the layer consisting essentially of carbon from the optical coating to form the transparent article.

2. The method according to Claim 1, wherein the forming comprises vapor depositing the protective coating.

3. The method according to Claim 2, wherein the vapor depositing comprises sputtering.

4. The method according to Claim 1, wherein before the heating the layer consisting essentially of carbon is 1 nm to 10 nm thick.

5. The method according to Claim 1, wherein the layer consisting essentially of carbon is doped with nitrogen.

6. The method according to Claim 1, wherein the layer consisting essentially of carbon consists of carbon and unavoidable impurities.

7. The method according to Claim 1, wherein the carbon in the layer consisting essentially of carbon comprises at least one form of carbon selected from the group consisting of diamond-like carbon and graphite.

8. The method according to Claim 1, wherein the reactive atmosphere is an atmosphere containing oxygen.

9. The method according to Claim 8, wherein the atmosphere containing oxygen is air.

10. The method according to Claim 1, wherein the carbon containing gas comprises at least one compound selected from the group consisting of carbon monoxide and carbon dioxide.

11. The method according to Claim 1, wherein the heating comprises raising a temperature of the protective coating to at least 400°C.

12. The method according to Claim 1, wherein the heating tempers the optical coating.

13. The method according to Claim 1, wherein the heating tempers the substrate.

14. The method according to Claim 1, wherein the substrate comprises a glass.

15. The method according to Claim 14, wherein the glass is transparent to visible light.

16. The method according to Claim 1, wherein the reacting removes all of the layer consisting essentially of carbon from the optical coating.

17. The method according to Claim 1, wherein a number of scratches in the optical coating after the removing is no more than 110% of a number of scratches in the optical coating immediately before the forming.

18. The method according to Claim 1, wherein the optical coating includes furthest from the substrate a homogeneous outermost layer comprising silicon nitride.

19. The method according to Claim 18, wherein

the protective coating further includes a scratch propagation blocker layer between the layer consisting essentially of carbon and the outermost layer; and

the scratch propagation blocker layer is a homogeneous layer comprising a material selected from the group consisting of

Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W;
oxides of Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W;
nitrides of Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W; and
mixtures thereof.

20. The method according to Claim 19, wherein the scratch propagation blocker layer consists of unavoidable impurities and a material selected from the group consisting of

Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W;
oxides of Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W;
nitrides of Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W; and
mixtures thereof.

21. The method according to Claim 19, wherein the scratch propagation blocker layer has a thickness of from 2 to 8 nm.

22. A method of making a transparent article, the method comprising

providing a substrate having an optical coating including furthest from the substrate a homogeneous outermost layer; and

forming a scratch propagation blocker layer on the outermost layer, wherein

the scratch propagation blocker layer is a homogeneous layer comprising a material selected from the group consisting of

Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W;
oxides of Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W;
nitrides of Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W; and
mixtures thereof.

23. The method according to Claim 22, wherein the outermost layer comprises silicon nitride.

24. The method according to Claim 22, wherein the forming comprises vapor depositing the scratch propagation blocker layer on the outermost layer.

25. The method according to Claim 22, wherein

the scratch propagation blocker layer comprises a material selected from the group consisting of TiO_2, SiO_2, ZnO, SnO_2, In_2O_3, ZrO_2, Al_2O_3, Cr_2O_3, Nb_2O_5, MoO_3, HfO_2, Ta_2O_5, WO_3 and mixtures thereof; and

the forming comprises

depositing on the outermost layer a metal, metal suboxide or metal subnitride diffusion barrier layer comprising at least one element selected from the group consisting of Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W;

heating the diffusion barrier layer in an atmosphere containing oxygen; and

reacting the diffusion barrier layer with the oxygen to form the scratch propagation blocker layer.

26. The method according to Claim 25, wherein the diffusion barrier layer has a thickness of from 4 nm to 6 nm.

27. The method according to Claim 25, wherein the atmosphere containing oxygen is air.

28. The method according to Claim 25, wherein the heating comprises raising a temperature of the optical coating to at least 400°C.

29. The method according to Claim 25, wherein the heating tempers the optical coating.

30. The method according to Claim 25, wherein the heating tempers the substrate.

31. The method according to Claim 25, further comprising

depositing a layer consisting essentially of carbon on the diffusion barrier layer before heating the diffusion barrier layer; and

reacting the layer consisting essentially of carbon with the oxygen to form a carbon containing gas.

32. The method according to Claim 31, wherein the carbon containing gas comprises at least one compound selected from the group consisting of carbon monoxide and carbon dioxide.

33. The method according to Claim 22, wherein the substrate comprises a glass.

34. The method according to Claim 33, wherein the glass is transparent to visible light.

35. A transparent article comprising

a substrate;

an optical coating comprising one or more layers on the substrate, where the one or more layers include furthest from the substrate a homogeneous outermost layer comprising silicon nitride; and

a protective coating on the outermost layer, wherein

the protective coating consists of

a scratch propagation blocker layer on the outermost layer, and

a layer consisting essentially of carbon on the scratch propagation blocker layer; and

the scratch propagation blocker layer is a homogeneous layer comprising a material selected from the group consisting of

Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W;

oxides of Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W;

nitrides of Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W; and

mixtures thereof.

36. The transparent article according to Claim 35, wherein the layer consisting essentially of carbon is doped with nitrogen.

37. The transparent article according to Claim 35, wherein the layer consisting essentially of carbon consists of carbon and unavoidable impurities.

38. The transparent article according to Claim 35, wherein the carbon in the layer consisting essentially of carbon comprises at least one form of carbon selected from the group consisting of diamond-like carbon and graphite.

39. A transparent article comprising

a substrate;

an optical coating comprising one or more layers on the substrate, where the one or more layers include furthest from the substrate a homogeneous outermost layer comprising silicon nitride; and

a protective coating on the outermost layer, wherein

the protective coating consists of a scratch propagation blocker layer on the outermost layer; and

the scratch propagation blocker layer is a homogeneous layer comprising a material selected from the group consisting of

Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W;

oxides of Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W;

nitrides of Ti, Si, Zn, Sn, In, Zr, Al, Cr, Nb, Mo, Hf, Ta and W; and

mixtures thereof.

40. The transparent article according to Claim 39, wherein the optical coating is a tempered coating.